

ABSTRACT

A process for producing an epoxide compound, characterized by reacting an olefin compound with hydrogen peroxide in the presence of: a metal oxide catalyst
5 obtained by reacting hydrogen peroxide with at least one member selected from the group consisting of tungsten metal, molybdenum metal, compounds of tungsten and a Group IIb, IVb, Vb, or VIb element, tungstic acid and salts thereof,
10 compounds of molybdenum and a Group IIb, IVb, Vb, or VIb element, and molybdic acid and salts thereof; at least one member selected from the group consisting of tertiary amine compounds, tertiary amine oxide compounds, nitrogenous aromatic compounds, and nitrogenous aromatic N-oxide
15 compounds; and a phosphoric acid compound.